

Diagnostics of the water quality of the Kuibyshev reservoir littorals with various anthropogenic load: Hydrobiological and multifractal analysis

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Abstract

We analyzed indicated structural indexes of zooplankton communities of the Kuibyshev reservoir intertidal zones. Species diversity of zooplankton was evaluated using a multifractal analysis. We found that total population size and biomass of zooplankton, population size and biomass of Copepoda and Cladocera species, index of species diversity in biomass, number of alpha animals, multifractal spectrum of species diversity of zooplankton were the characteristics that reflect adequately environmental changes. Quantitative indexes of rotifers, index of species diversity in population size, saprogenic index and QB/T index are not reliable criteria in the assessment of water's quality. © by PSP.

Keywords

Multifractal analysis, Water quality, Zooplankton